
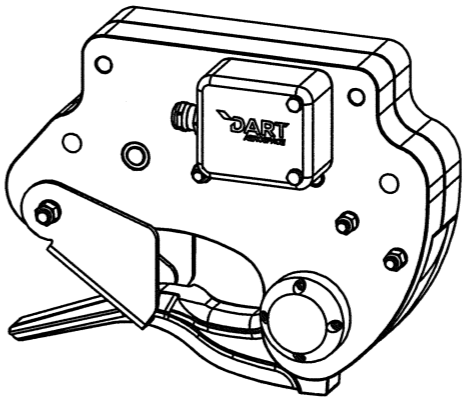
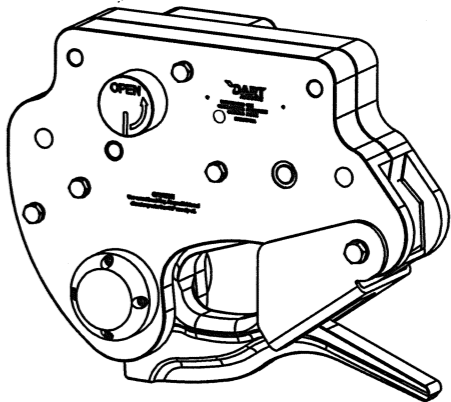


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

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
		B/O	C10-9-2	1	LATCH BEARING		(TORRINGTON #6NBC914YZP)	3
			C10-11	1	MANUAL RELEASE KNOB	6061		2
			C10-21-1	2	CLOCK SPRING	301		2
			C10-21-2	2	SPRING COVER	6061		2
		B/O	C10-41	1	STRAIN RELIEF CONNECTOR	BRASS	1/2 TRADE SIZE (MCMaster-CARR #6907K14)	2
			C45-8-4	1	SOLENOID COVER GASKET	BLENDED RUBBER		2
			C45-8-5	1	SOLENOID COVER	6061		2
			C20-100	1	SIDE PLATE (MRK)	7075-17351		2
		B/O	C20-120	3	LOCATING PIN	STEEL	Ø1/4 X 1-1/2 (MCMaster-CARR #98381A546)	3
			C20-200	1	SIDE PLATE - SOLENOID SIDE	7075-17351		2
			C20-220	2	UPPER LOCK BUMPER	POLYURETHANE		3
			C20-230	1	LOWER LOCK BUMPER	POLYURETHANE		3
		B/O	C20-240	2	#2 DRIVE SCREW 	COATED STEEL	1/8 (MCMaster-CARR #90081A074)	2
			C20-300A	1	LOAD BEAM ASSEMBLY			2
			C20-321	2	BUSHING	ALUMINUM BRONZE 630		2
			C20-330	1	LOAD BEAM BUMPER	RUBBER		3
			C20-410	2	KEEPER BUSHING	SINTERED BRONZE	(SYMMCO #SF-1418-10) MODIFIED	2
			C20-400	1	KEEPER			2
		B/O	C20-440	1	KEEPER SPRING	303	Ø.102 X 15-1/8 DENDOFF SPRING	2
			C20-445	1	KEEPER SPRING SPACER	DELIN	5/8 OD X 1/2 ID (MCMaster-CARR #1830T149) MODIFIED	2
			C20-500A	1	LOCK ASSEMBLY			3
			C20-510	1	LOCK ROLLER SHAFT	4140/4142		3
			C20-520	1	LOCK ROLLER	4140/4142		3
		B/O	C20-540	2	LOCK SHAFT BUSHING	SINTERED BRONZE	(SYMMCO #SF-2028-12)	3
		B/O	C20-560	1	LOCK SPRING ANCHOR PIN	S.S.	Ø3/16 X 2 (MCMaster-CARR #97395A618)	3
		B/O	C20-570	1	LOCK RETURN SPRING	302	Ø.04 WIRE DENDOFF	3
			C20-600A	1	BELL CRANK ASSEMBLY			3
			C20-610	1	LINK PIN - SHORT	O-1		3
		B/O	C20-650	1	BELL CRANK BUSHING - LONG	SINTERED BRONZE	(SYMMCO #SF-2432-12)	3
		B/O	C20-655	1	BELL CRANK BUSHING - SHORT	SINTERED BRONZE	(SYMMCO #SF-2432-08)	3
			C20-700	1	LEVER ARM	4140/4142		3
			C20-710	1	LEVER ARM PIVOT BEARING PIN	4140/4142	Ø 3/8 (MCMaster-CARR #5252T315)	3
			C20-715	1	LEVER ARM BEARING PIN	01		3
		B/O	C20-720	1	LEVER ARM BEARING		(KAMAN 6NBF817YJ)	3
		B/O	C20-735	1	LEVER ARM RETURN SPRING	303	Ø.07 X 4-7/8 DENDOFF	3
		B/O	C20-740	1	LINK SPRING	303	Ø.04 X 9-7/8 DENDOFF	3
			C20-750	1	LINK	4140/4142		3
			C20-755	2	LEVER ARM BUSHING	4140/4142		3
			C20-760	2	LINK PIN - LONG	4140/4142		3
		B/O	C20-830	8	LOCK WASHER	STEEL	#10 (MCMaster-CARR #91102A740)	2
			C20-900	1	SOLENOID ASSEMBLY			
		B/O	C45-3-2-1	2	SNAP RING	STEEL	Ø3/8 (KAMAN 1400-0037)	3
		B/O	C45-3-4-1	6	RETAINING RING	BERYLLIUM COPPER	3/16 SHAFT (MCMaster-CARR #98410A110)	3
		B/O	C45-12-6	2	RETAINING RING	STEEL	(KAMAN #N1400-0050)	3
			600.1309	1	LABEL 	ALUMINUM		N/S
			600.1309-A	1	LABEL 	ALUMINUM		N/S
		B/O	600.1347	1	C10 WARNING LABEL 	VINYL	SIGNS NOW	N/S
		B/O	188-FSCS-1032-3/4	8	BOLT	STEEL	10-32 X 3/4 (MCMaster-CARR #90128A945)	2
		B/O	188-FPSS-1032-1/4	2	LATCH SET SCREW	S.S.	10-32 X 1-1/4 (MCMaster-CARR #94355A330)	3
		B/O	188-FPSS-1/4 20-3/8	2	SET SCREW	S.S.	1/4-20 X 3/8 (MCMaster-CARR #92311A535)	2
		B/O	AN4-24A	2	SOLENOID COVER BOLT	STEEL	1/4-28 X 2.53	2
		B/O	AN6-35A	4	SIDE PLATE BOLT	STEEL	3/8-24 X 3.703	2
		B/O	AN7-41A	1	KEEPER BOLT	STEEL	7/16-20 X 4.219	2
		B/O	AN960-416	3	SOLENOID COVER WASHER	STEEL	Ø1/4	2
		B/O	AN960-416L	2	SOLENOID WASHER	STEEL	Ø1/4	2
		B/O	AN960-616	8	SIDE PLATE WASHER	STEEL	Ø3/8	2
		B/O	AN960-716	2	KEEPER BOLT WASHER	STEEL	Ø7/16	2
		B/O	MS21044N6	4	SIDE PLATE NUT	STEEL	3/8-24	2
		B/O	MS21044N7	1	KEEPER NUT	STEEL	7/16-20	2
		B/O	MS21083N4	2	NYLOCK NUT	STEEL	1/4-28	2
		B/O	MS27039-4-10	1	SOLENOID COVER SCREW	STEEL	1/4-24 X .656	2
			EL314-SJTOW	1	ELECTRICAL WIRE 3/14 SJTOW		(TEXCAN 314-SJTOW 3/14)	3
		B/O	32448	2	16-14 AWG KNIFE CONNECTOR		(ALLIED ELECTRONICS #32448)	3
		B/O	EL-PLUG-M	1	MALE PLUG	PE High Density	(MCMaster-CARR #7216K5)	3
		B/O		1	HEAT SHRINK TUBE	RUBBER	(MCMaster-CARR #2595K2)	3



REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1	14-0084	CH'D TITLEBLOCK WAS RED BARN IS DART. ADDED PART C20-445.	10/28/2014	DJN	JAG
2		UPDATED TO NEW DRAFTING STANDARDS. CH'D P/N'S WAS C20-245 IS 600.1309, WAS C20-630 IS C10-11, WAS C20-640 IS 188-FPSS-1/4 20-3/8, WAS C20-705 IS 188-FPSS-1032-1/4, WAS C20-800 IS C10-21-1, WAS C20-810 IS C10-21-2, WAS C20-940 IS C45-8-5, WAS C20-950 IS C45-8-4, WAS AN7-41 IS AN7-41A. 600.1347 & 600.1309-A ADDED TO BOM. 32448 DELETED. ADDED FOR REBUILD ONLY NOTES. ADDED ENGRAVING NOTES & DETAILS.	7/13/2015	DPD	JAG
C		P/N WAS AN4-23A IS AN4-24A AND DESCRIPTION WAS 1/4-28 X 2.406 IS 1/4-28 X 2.53	5/07/2019	MBB	

SEE ATTACHED DEVIATION



NOTES:

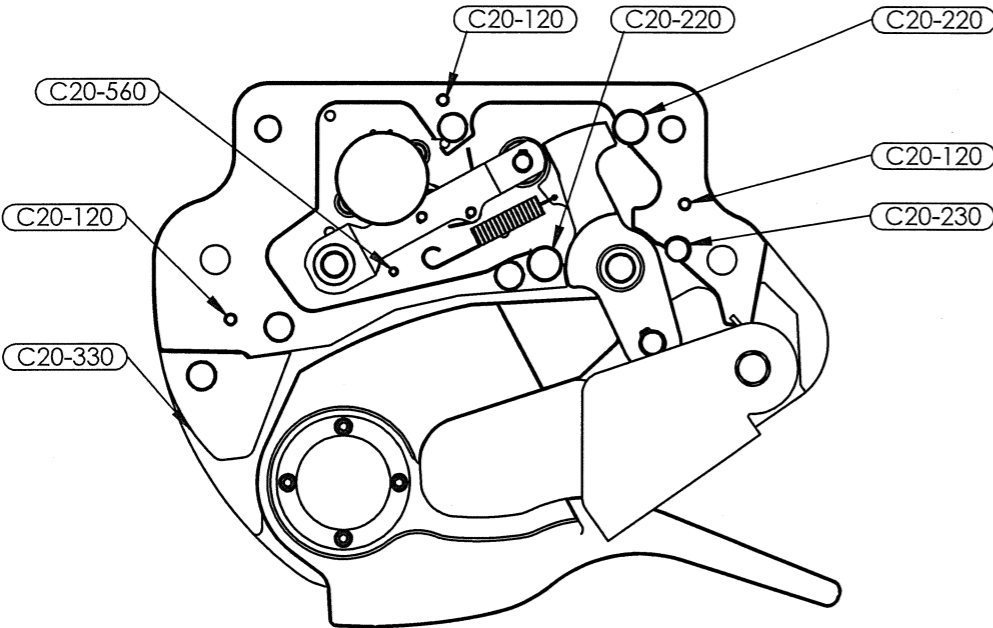
-  1 FOR REBUILD ONLY.
-  2 FOR CUSTOMER REBUILD ONLY.

	
TITLE C20 HOOK ASSEMBLY	
DWG NO. C20	REV C
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 .XX ± .01 .X ± .1	DRAWN BY: CANAM APPROVED  HEAT TREAT FINISH SPEC 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING
SCALE 1:6	DATE SHEET 1 OF 4

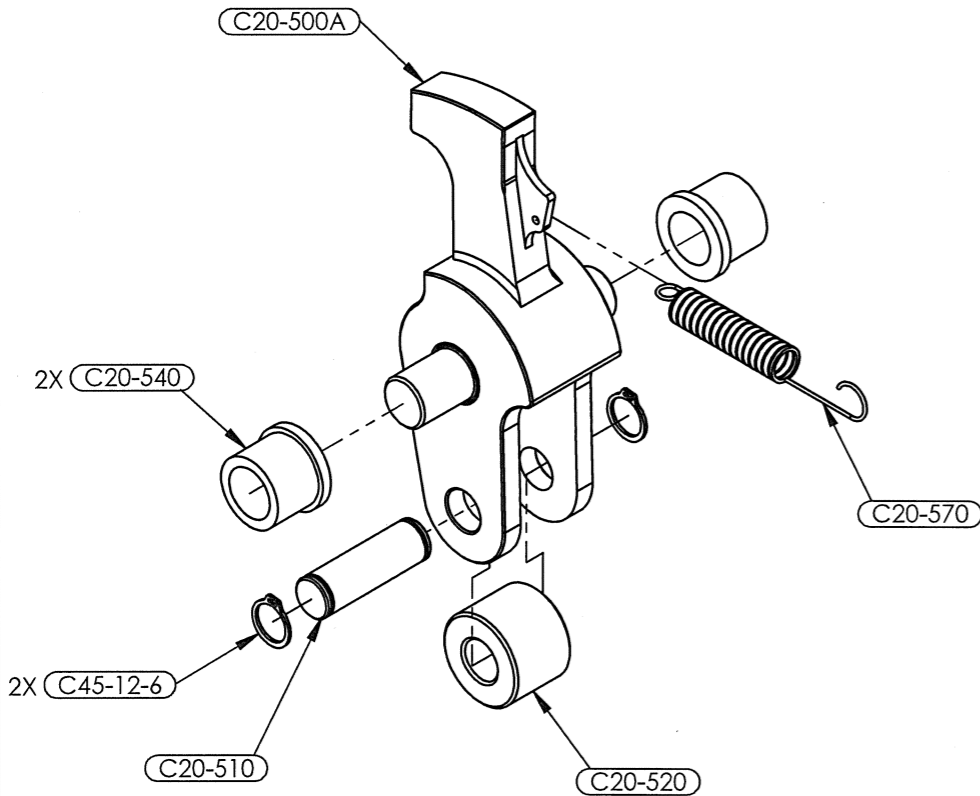


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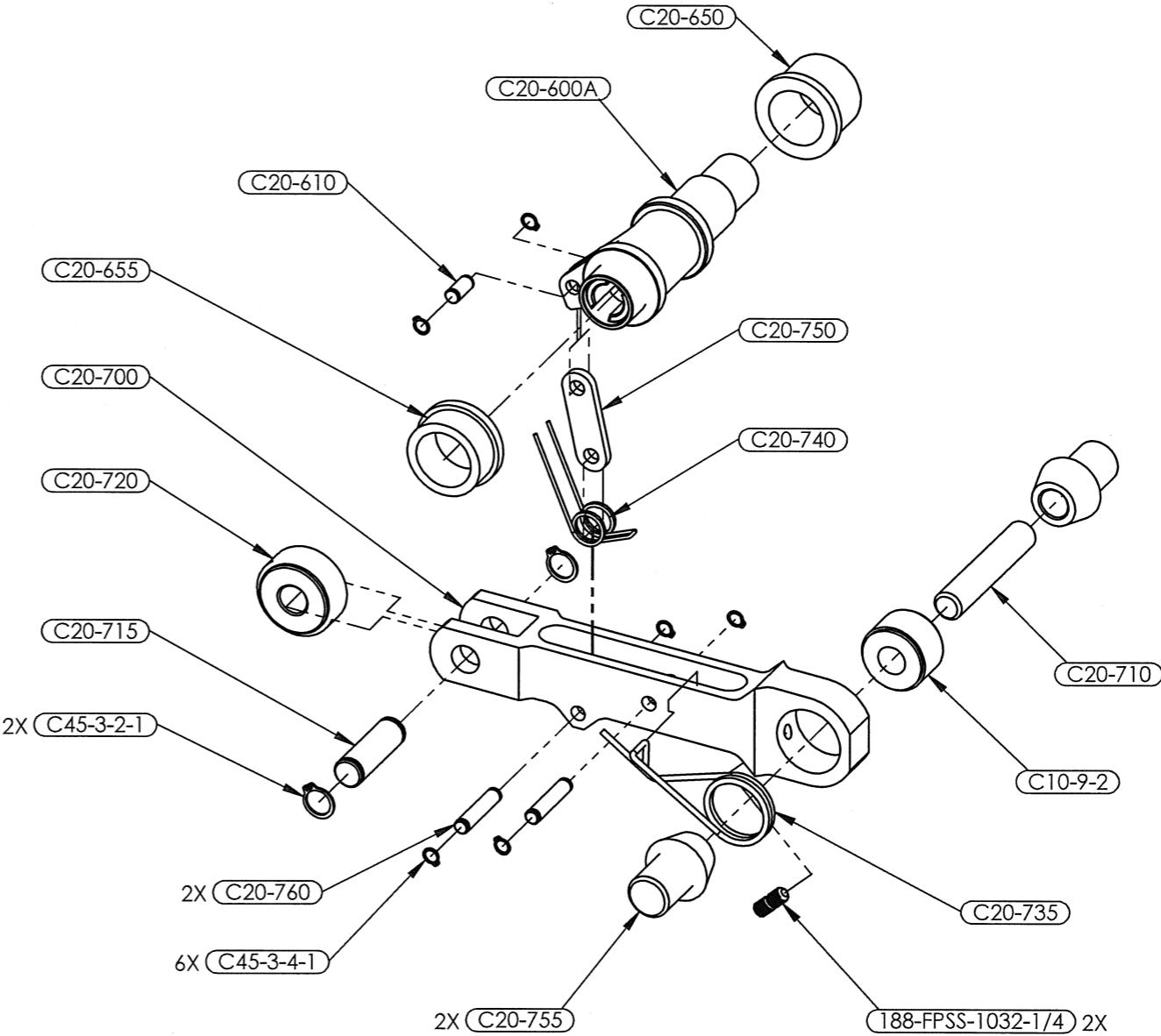
REV			ECR		REVISIONS		DESCRIPTION		DATE	INITIAL	APPROVED



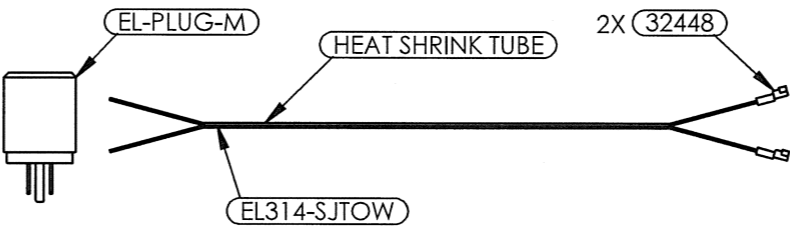
SIDE PLATE REMOVED TO SHOW INTERNAL COMPONENTS  
SCALE: 1:4



LOCK ASSEMBLY



LATCH ASSEMBLY



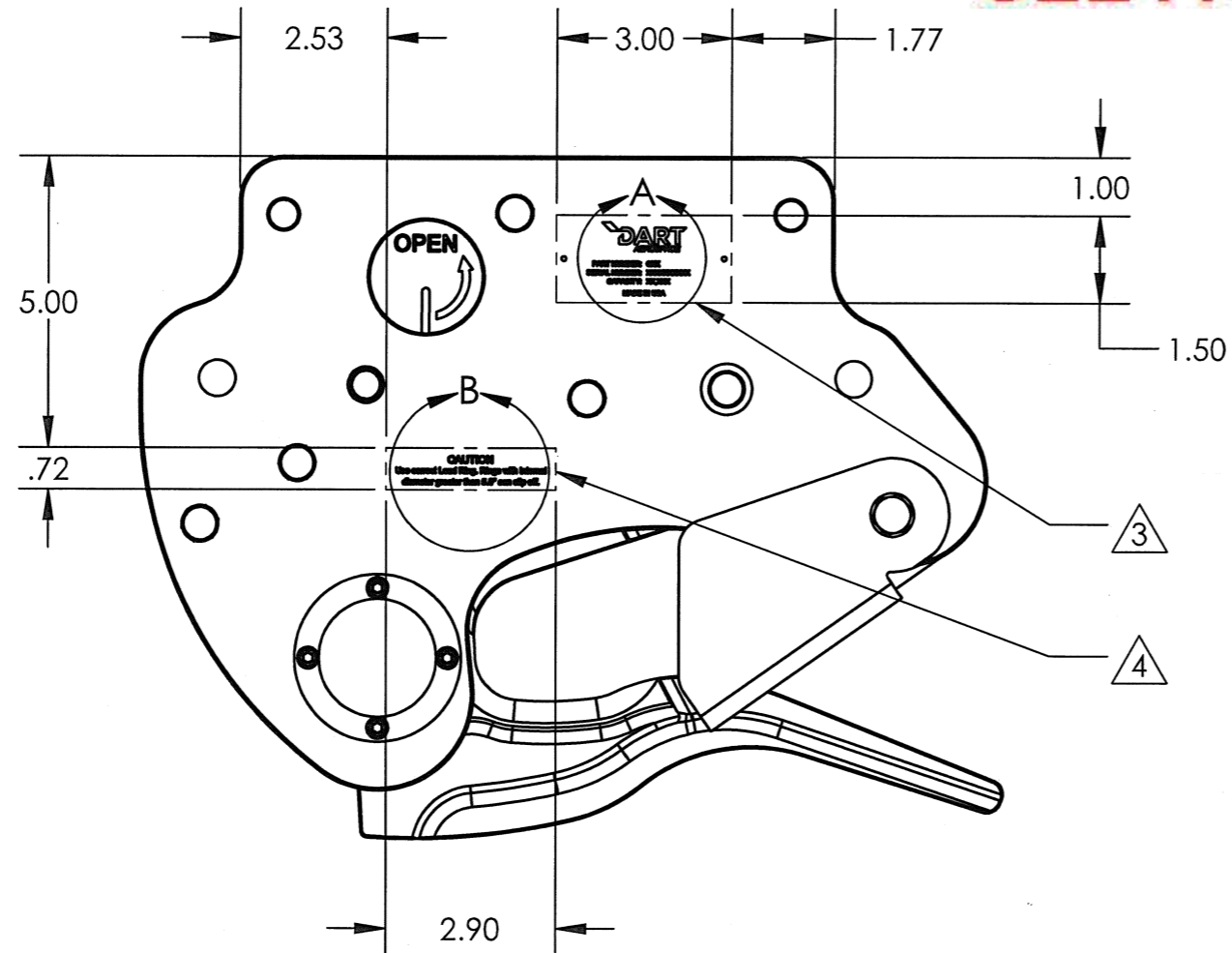
WIRE ASSEMBLY

<b>DART</b> AEROSPACE	
TITLE C20 HOOK ASSEMBLY	
DWG NO. C20	REV C
MAT'L	DRAWN BY: CANAM
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005	FRACTIONS ± 1/8
.XX ± .01	ANGLES ± 5°
.X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE
SHEET 3 OF 4	

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REVISIONS							
REV	ECR	DESCRIPTION			DATE	INITIAL	APPROVED

**SEE ATTACHED DEVIATION**



DETAIL A  
SCALE 1 : 1



DETAIL B  
SCALE 1 : 2

**NOTE:**

- 3 LASER ENGRAVE DART LOGO, P/N, S/N, CAPACITY, "MADE IN USA," WITHIN BOUNDARY.
- 4 LASER ENGRAVE CAUTION NOTE, WITHIN BOUNDARY.

<b>DART AEROSPACE</b>	
TITLE C20 HOOK ASSEMBLY	
DWG NO. C20	REV C
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1	DRAWN BY: CANAM APPROVED [Signature] HEAT TREAT FINISH SPEC USED ON MODEL
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:4	DATE SHEET 4 OF 4

Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

Job: _____  Part No. <u>C series hooks and SWA Swivels</u>	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>	<b>DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input checked="" type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Water Jet <input type="checkbox"/>            Supplier <input type="checkbox"/>            Quality <input type="checkbox"/> </div> </div>		
Date :	Sequence #:	QTY Affected :	<b>MRB (QSI042)</b>  May, 9 2019 <i>M. Lee</i>	
<b>Description Work Order Deviation</b>		<b>Disposition</b>		<b>Completed By</b>
The electrical wires listed under "Acceptable Alternate Wire" on the attached sheet are acceptable to use in place of the "Drawing Specified Wire"		This deviation is acceptable.  No change to fit form or function.  The job route must specify the wire that is called out on the drawing  The inventory P/N must reflect the same P/N that was received from a vendor		Lead hand / Supervisor   
				QC / QA Coordinator   
<b>Root Cause</b>		<b>FAULT CATEGORY</b>		
<div style="display: flex; flex-direction: column;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Presservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input checked="" type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div>		<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced  <input type="checkbox"/> Bending  <input type="checkbox"/> Crushing  <input type="checkbox"/> Cracks  <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist  <input type="checkbox"/> Marks/Chatter  <input type="checkbox"/> Mislabeled         </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination  <input type="checkbox"/> Misaligned/off center  <input type="checkbox"/> BOM/Route  <input type="checkbox"/> Broken/Damage/Defect  <input type="checkbox"/> Incomplete/Unclear Instructions  <input type="checkbox"/> Drill Holes  <input type="checkbox"/> Fit/Function         </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Folio/Program  <input type="checkbox"/> Grain Direction  <input type="checkbox"/> Weld  <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Out of Sequence  <input type="checkbox"/> Off-set/Set-up         </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong  <input type="checkbox"/> Outside Tolerance  <input type="checkbox"/> Drawing  <input type="checkbox"/> Finish  <input type="checkbox"/> Part Lost/Missing  <input type="checkbox"/> Misread         </div> </div>		
Other/Details:				

P/N	Revision	Drawing Specified Wire	Acceptable Alternate Wire
C2	2	MIL-C-27500 11-14416	N/A
C3	2	MIL-C-27500 11-14417	N/A
C10	3	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
C15	2	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
C20	C	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
C45	C	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
C60	C	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
C250	C	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA3-2	3	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA3-3	3	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA3-4	3	EL 414-ARTIC 4/14	Texcan 01121-744A5
SWA6A-2	E	Texcan 01121-724AM	N/A
SWA6A-3	E	Texcan 01121-734A5 or 01004-08-047	N/A
SWA6A-4	E	Texcan 01121-744A5	N/A
SWA6A-6	E	Texcan 04121-764A5	N/A
SWA6A-8	E	Texcan 12701-08-014 or McMaster 7081K38	N/A
SWA10A-2	3	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA10A-3	3	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA10A-4	3	EL 414 ARTIC 4/14	Texcan 01121-744A5
SWA10A-6	3	EL 616 ARTIC	Texcan 04121-764A5
SWA10A-8	3	Polar Wire 30806	Texcan 12701-08-014 or McMaster 7081K38
SWA15A-2	1	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA15A-3	1	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA15A-4	1	EL 414 ARTIC 4/14	Texcan 01121-744A5
SWA15A-6	1	EL 616 ARTIC	Texcan 04121-764A5
SWA15A-8	1	EL 816 ARTIC	Texcan 12701-08-014 or McMaster 7081K38
SAW25A-2	1	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SAW25A-3	1	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SAW25A-4	1	EL 414 ARTIC 4/14	Texcan 01121-744A5
SAW25A-6	1	EL 616 ARTIC	Texcan 04121-764A5
SAW25A-8	1	EL 816 ARTIC	Texcan 12701-08-014 or McMaster 7081K38